

Date: Mon, 13 Sep 93 15:02:57 PDT
From: Info-Hams Mailing List and Newsgroup <info-hams@ucsd.edu>
Errors-To: Info-Hams-Errors@UCSD.Edu
Reply-To: Info-Hams@UCSD.Edu
Precedence: Bulk
Subject: Info-Hams Digest V93 #1088
To: Info-Hams

Info-Hams Digest Mon, 13 Sep 93 Volume 93 : Issue 1088

Today's Topics:

 6785 kHz
 CW and DSP (2 msgs)
 DXCC Country Prefixes (Help)
 IC229H low audio problem
Morse code is saving my college career
 Neighborhood watch groups
 Radio Shack HTX-404 Reports ?
 Radio Shack is people, too.
 Repeater Directories?
 Rubber Duckies Banned!
There goes the rest of 20M (2 msgs)
 transmitter health hazards
 Voice Keyers & TS850
 Where is the HTX- HT made ?

Send Replies or notes for publication to: <Info-Hams@UCSD.Edu>
Send subscription requests to: <Info-Hams-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Info-Hams Digest are available
(by FTP only) from UCSD.Edu in directory "mailarchives/info-hams".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.

Date: Mon, 13 Sep 1993 15:15:43 GMT
From: cs.yale.edu!csusys.ctstateu.edu!white@yale.arpa
Subject: 6785 kHz
To: info-hams@ucsd.edu

Sounds like the Confederate Air Force (vintage aircraft flyers) to me...

Harry
white@sleepy.ctstateu.edu

Date: Mon, 13 Sep 1993 15:05:04 GMT
From: swrinde!sdd.hp.com!hp-cv!hp-pcd!hpcvsnz!tomb@network.ucsd.edu
Subject: CW and DSP
To: info-hams@ucsd.edu

CECILMOORE@DELPHI.COM (cecilmoo@news.delphi.com) wrote:
: >to reproduce the low end of the dynamic range because no one can
: >hear it due to the nominal 62 db SPL of an ordinary room. You
: >certainly won't find that in any commercial amateur receiver.
: >Some homebrew DC (Direct Conversion) designs can come close, but
: >then you have an unfilterable image that aliases into your output.
: >Even DSP can't deal with that.
: >Gary Coffman KE4ZV

..

: A properly designed digitally controlled Direct Conversion plus
: DSP CW system deals with images by moving the local oscillator
: frequency. The desired CW signal shifts frequency in one
: direction while the unwanted image shifts frequency in the
: opposite direction, thus making the image easy to eliminate with a
: tunable brick-wall Finite Impulse Response filter. When my
: firmware detects an error, it dynamically shifts the LO and the
: step-locked FIR filter center frequency by plus or minus 10% up to
: a maximum of 2022 Hz and down to a minimum of 400 Hz. I watch the
: characters pop out on the screen of my PC and rarely turn on my
: HiFi system to listen to the screeching.

Cecil's system is a very reasonable way to deal with images in a
specific application. Another more general way to "deal" with images
is to not throw away the phase information in your direct conversion
receiver. One way to accomplish this is to run two mixers with
quadrature RF phase shifts (or, I suppose, just known non-zero phase
relationship, though 90 degrees sure makes it easier...) and properly
digitize and process the _two_ baseband signals that result. Another
way is to simply digitize at RF, though this is neither so simple to
do nor to process. If there are any doubts that these techniques
work, have a look at FFT-based spectrum/network analyzers.

Date: 13 Sep 1993 17:45:12 GMT
From: swrinde!cs.utexas.edu!math.ohio-state.edu!news.acns.nwu.edu!
casbah.acns.nwu.edu!rdewan@network.ucsd.edu
Subject: CW and DSP

To: info-hams@ucsd.edu

In article <CDAsKG.MBH@hpcvsnz.cv.hp.com>, Tom Bruhns <tomb@lsid.hp.com> wrote:

A few sentences have been deleted for brevity.

>.... Another
>way is to simply digitize at RF, though this is neither so simple to
>do nor to process. If there are any doubts that these techniques
>work, have a look at FFT-based spectrum/network analyzers.
>

BTW, Kenwood follows this approach for digital modulation and demodulation in their TS850 - DSP100 combination. The DSP100 provides for an additional conversion to 38Kcs and that is processed digitally. They do not provide for any significant digital filtering (lack of processing power at the sampling rate is my guess for the reason) - just modulation and demodulation. Since this is not quite so dramatic, this option for the TS850 never caught on.

I tried a DSP100 for a couple of weeks. It did not do much for CW. I could slow down the rise and fall times but I like the timing in the stock unit just fine. For \$600 that the units, I do without it. I suppose it might have been more useful if I were working SSB.

Rajiv
aa9ch
Address: r-dewan@nwu.edu
Phone: None on HF. Only CW.
Look for aa9ch/m on bottom end of 30m.

Date: Mon, 13 Sep 1993 14:45:19 GMT
From: worldbank.org!news@uunet.uu.net
Subject: DXCC Country Prefixes (Help)
To: info-hams@ucsd.edu

Can anyone clear up the confusion over the CIS prefixes?

I seem to recall that they have been issued with new blocks of prefixes, and that the "old" UA, UB, UC, UD... prefixes have been replaced with Ex, Ey, Ez, 4a, 4b.. etc. Unfortunately, the current ARRL DXCC List (Jul 93) only reflects the "old" prefixes, not the new ones. What dates do the new prefixes become current (and what is the status of the old prefixes; I doubt if they become "deleted" countries)?

The reason for the query is that I'm moving my logs from a Macintosh relational database to DXBase, and changing the prefixes will be a lot easier to do in the

--

Randy KA1UNW If you get a shock while
 servicing your equipment, "Works for me!"
randy@192.153.4.200 DON'T JUMP! -Peter Keyes
 You might break an expensive tube!

Date: Sat, 11 Sep 93 16:16:11 GMT
From: mercury.hsi.com!a3bee2.radnet.com!cyphyn!randy@uunet.uu.net
Subject: Neighborhood watch groups
To: info-hams@ucsd.edu

If they all have liecences , and transmit only on Amateur freq, and do not 'rebroadcast' the PD thru their rigs...(too easy to do with those silly extended range sets...better to have a scanner separate really)....and do not say anything that could be viewed as giving out PD info of ongoing events then it would be ok....I'm sure others will add or modify this.

However....the real reliable range of those sets (vhf or uhf) is quite limited, unless thru a repeater, and very few repeater groups will want a nite after nite net on for the duration of time such watch groups would need. So be ready for that. ok?

Idea....set up several cars at good spots to relay info from small group to small groups when info has to be passed more than a few 1000's feet. Make sure the PD knows you are doing the watch and which cars will be where, visual ID info of the cars.....with Stalking Laws now appearing, just sitting in yer car with a 2 way radio can be....hard to explain. The short range just indicated is the RELIABLE...not iffy range, for HT type radio-to-radio with the typical rubber ducky antennas.

You'd also want to pick a freq that is not bombed by qrm from other sources, and not on a simplex freq that has regular use by others... ie...don't use 146.52 !

Oh...one more thing....you can't use code words or such....FCC rule: can't conceal the meaning of a message....and I don't think you want to use the Ten four code either.

Wish ya luck...let us know how it goes.

--

Randy KA1UNW If you get a shock while
 servicing your equipment, "Works for me!"
randy@192.153.4.200 DON'T JUMP! -Peter Keyes

You might break an expensive tube!

Date: Mon, 13 Sep 1993 15:50:47 GMT
From: pa.dec.com!e2big.mko.dec.com!nnnpd.lkg.dec.com!ryn.mro4.dec.com!
est.enet.dec.com!randolph@decwrl.dec.com
Subject: Radio Shack HTX-404 Reports ?
To: info-hams@ucsd.edu

In article <930910201417.2a3c@MAR65.MAR.ORA.FDA.GOV>,
ODONNELL@MAR65.MAR.ORA.FDA.GOV writes...
>Radio Shack HTX-404 Reports ?
>
>Rich asked:
>
>>Any one use the HTX-404 UHF handy that would like to offer some comments to
>>the net ?
>
>The biggest fault
>I see is the limited selection of battery capacity, but I have heard (don't
>know this to be accurate however) that some of the older Icom type batteries
>may work on it. I have not been able to prove that.

Yup, I have run an IC2AT with an HTX202 battery pack before. Nice little
feature there, although I understand Icom designed the radios for Rat Shack, so
not a surprising one. Mechanically a perfect match, but you may want to check
out the voltage/current ratings of the batteries in question before you commit
to buying any.

-Tom R. N100Q randolph@est.enet.dec.com

Date: 13 Sep 93 09:27:39
From: destroyer!vela.acs.oakland.edu!rcsuna.gmr.com!rcsuna.gmr.com!
vbreault@uunet.uu.net
Subject: Radio Shack is people, too.
To: info-hams@ucsd.edu

In article <2468@indep1.UUCP> clifto@indep1.UUCP (Cliff Sharp) writes:

In article <VBREAULT.93Sep8114939@rinhp750.gmr.com> vbreault@rinhp750.gmr.com
(Val Breault) writes:

>obRadio:
>Radio Shack has recently taken a renewed interest in amateur radio.
>This is probably due to the success of the codeless technician license.

Remember those words of yours, "MASS marketing". Expand your markets,

create a need and then fill it. So...

There is now a codeless technician license. This is probably due at least in part to the fact that Ed Juge, W5T00, Radio Shack bigwig in charge of finding new markets and filling their needs, was on the committee which recommended the codeless technician license. (Wonder how he voted? :-)

No kidding? I didn't know that. Hey, that's pretty cool.

I don't know if Cliff was trying to make that sound somehow sinister, making it look like the proverbial "fox guarding the hen house" or not, but I personally think that was a pretty good thing.

Even though I hold an extra class license and use cw exclusively on hf, I still think that the codeless technician license is a great way for folks to get into amateur radio. The fact that Radio Shack (or Icom or Kenwood or Yaesu....) can profit from that change is irrelevant.

The RS line of amateur band ht's offer a very good value for those new members of the amateur radio community. I'm proud to sell them and would recommend them even if I didn't work part-time at RS. Furthermore, I'm encouraged to learn that there is a ham that works for a mass marketer who is in a position to fill the needs of the amateur radio community.

I've heard reports that other mass marketers may be selling 2 meter radios. I wonder if any of their purchasing or marketing people are active hams?

(It's not obvious from his callsign, but Ed Judge W5T00 holds an amateur extra class license.)

--

Val Breault - N80EF - vbreault@gmr.com \ /|
Instrumentation dept GM NAO R&D Center \ / |
My opinions are not necessarily those of \ /__|
GMR nor of the General Motors Corporation \ / |___

Date: Mon, 13 Sep 1993 19:43:55 GMT
From: news.service.uci.edu!ttinews!avatar!sorgatz@network.ucsd.edu
Subject: Repeater Directories?
To: info-hams@ucsd.edu

In article <747645261snx@skyld.tele.com> jangus@skyld.tele.com (Jeffrey D. Angus) writes:

>

>In article <1993Sep9.191208.15830@ttinews.tti.com> sorgatz@avatar.tti.com writes:

>

> > That's not fair either, and neither is the situation on 10m but I don't

> > really expect you to know about that either...suffice it to say the FCC
> > and the ARRL are MUCHO SCARED of a group call MALDEF...ever heard of it?
> > Don't call me a raving xenophobe, I'm playing by the rules and expect the
> > others to do likewise !

>

> Heh heh heh, I love it when someone assumes I don't know what I'm talking
> about. The situation you're talking about is due to an enforcement problem.

WRONG! The FCC had at one time a sweep planned for the 27.4051-28.0000 MHz segment..they did this 3 or 4 days in the SFV and busted a few dozen of the higher-powered hispanic bandits that run those 'funny freqs'. MALDEF stepped in and counterfiled every charge, citing the FCC's actions as being a form of "Selective Enforcement..that targeted hispanics...(sic)". The FCC wound up dropping the charges. Must be nice to have an army of store-front lawyers that can scream discrimination! at every charge.

> That is in turn due to a general shortage of money in every agency from the
> people that work out of the FCC offices down to the guys in front of the
> local 7-11 with cardboard signs. With the limited resources of the FCC, they
> deal with what they have established as priorities. 10 meters is not at the
> top of their list. Most of the public radio service is not at the top of
> their list. And blaming the ARRL for a lack of enforcement is about as out
> of touch as you can get and still tell if the sun is up. This is almost as
> humorous as one of our locals that accused the ARRL of selling off 220 to
> the commercial interests in exchange for codeless licensing from the FCC.

>

> Also, since you seem to wish to be associated with a cartoon character,
> "When I want your opinion, I'll give it to you." Mok

>

The FCC is under the budget gun, I agree, but it wasn't always like this.. I published a list of the local So. Cal. FCC priorities a few weeks back, but I doubt like hell you noticed! That they are a bunch of pansies in their dealings with a group like MALDEF, it's a matter of public record..
..as for the cartoon character aspect of this argument:

"Let me show you a trick...that Mom showed me when you weren't around.." Avatar

> The spectrum is there for all of us to use. Not some of us to hoard for
> occasional personal use. The days of everyone having a private repeater
> (and the repeater coordination groups to perpetuate this) are over.

>

> Rather than foam at the mouth about the 'situation' out in the SFV, how
> about getting a new radio. One that allows you to change frequencies.

>

>

>

Oh I've got the gear...it's just a goddamned shame that I have to listen to a bunch of Spanish-speaking twits running hi-power FM simplex at 145.815... ..and they seem totally ignorant of the EXISTANCE of a band plan..they say: "OSCAR? Oh jyout mus be keedin'd! I doan heer no satellites!"

...just another day on 2m..where the ignorant can claim to be discriminated against..and never fail to find a sucker to listen to their drivel and believe that which is pure bunk! Go away...the band plan has the weight of law, Part 97 says so! You can't change the fact that these things they do are simply defined as ILLEGAL OPERATION. And it wouldn't matter to me if they were speaking the African Click-tongue, or French or Spanish or English...that they have sought be exclusive with their language, and then decided to take-on the established order makes this a war...you can whimper all you like, but you can't make me like something that I don't like!

-Avatar-> (aka: Erik K. Sorgatz) KB6LUY +-----+
TTI(es@soldev.tti.com)or: sorgatz@avatar.tti.com *Government produces NOTHING!*
3100 Ocean Park Blvd. Santa Monica, CA 90405 +-----+
(OPINIONS EXPRESSED DO NOT REFLECT THE VIEWS OF CITICORP OR ITS MANAGEMENT!)

Date: 13 Sep 93 11:21:56 GMT
From: psinntp!arrl.org@uunet.uu.net
Subject: Rubber Duckies Banned!
To: info-hams@ucsd.edu

In rec.radio.amateur.misc, mcduffie@unlinfo2.unl.edu (Gary McDuffie Sr) writes:

>Much deleted... (please read if you haven't!)

>I ABSOLUTELY LOVE IT!!!!!!

So did I, especially reading all about Ed Hairless. :-).

Thanks for the laugh!

73 from ARRL HQ, Ed

Ed Hare, KA1CV
American Radio Relay League
225 Main St.
Newington, CT 06111
(203) 666-1541 - voice
ARRL Laboratory Supervisor
RFI, xmtr and rcvr testing

ehare@arrl.org

"You will never put the puzzle together
if you keep putting all of the pieces
back in the box." Colleen

Date: Mon, 13 Sep 1993 13:13:57 GMT
From: dog.ee.lbl.gov!agate!howland.reston.ans.net!darwin.sura.net!
mlb.semi.harris.com!controls.ccd.harris.com!drs@network.ucsd.edu
Subject: There goes the rest of 20m
To: info-hams@ucsd.edu

You people are missing the point.

1. This is a matter of courtesy. We CW operators don't QRM SSbers or anyone else.
2. Amateur Radio is supposed to be used to explore areas like digital communications - fine - but I don't think we are supposed to try and establish another western union network. There's too many computer nerds out there, and not enough people with the spirit.

Date: 13 Sep 93 09:33:19 EDT
From: psinnntp!arrl.org@uunet.uu.net
Subject: There goes the rest of 20M
To: info-hams@ucsd.edu

In rec.radio.amateur.misc, adams@chuck.dallas.sgi.com (Charles Adams) writes:
[stuff deleted]
>are we talking about a coke bottle against a key type scenario? what
>movie was that in?

On the Beach

Chuck Hutchinson, K8CH ARRL Membership Services Manager
phone 203 - 666 - 1541 225 Main St, Newington, CT 06111
fax 203 - 665 - 7531 ***** This line for rent *****

Date: 13 Sep 93 13:55:02 GMT
From: ogicse!emory!kd4nc!ke4zv!gary@network.ucsd.edu
Subject: transmitter health hazards
To: info-hams@ucsd.edu

In article <1993Sep12.192200.28016@julian.uwo.ca> jsmith@gaul.csd.uwo.ca (John Smith) writes:

>Could someone please tell me what health hazards, if any, are associated
>with having a 20kw transmitter close to your property? Thanks for
>any help.

John, we'd need to know the frequency of the transmitter, and exactly how close it, or more precisely it's antenna, is from you to be able to evaluate any possible risk. The only known health risk due to radio frequency energy is RF heating of tissue. This is particularly important around the eyes. It's known that prolonged exposure to high level RF at certain frequencies can cause cataracts. There is an OSHA standard that dictates what RF levels are permitted in areas where workers or the public may be exposed. This standard is measured in milliwatts per square centimeter and varies according to frequency. For commercial radio sites, areas where exposure is higher than the OSHA standard must be clearly marked and access controls must be in place.

RF field strength drops off rapidly with distance under the inverse square rule. Doubling distance reduces the field four times. So after only a very short distance from the antenna, the fields are down in the safe range. That's one reason broadcasters, and radio amateurs, like tall towers. The height is usually sufficient so that the field strength is below OSHA limits by the time it reaches ground level. If you are concerned about RF fields, support the tallest towers you can since the height offers you great protection.

Gary

--

Gary Coffman KE4ZV	"If 10% is good enough	gatech!wa4mei!ke4zv!gary
Destructive Testing Systems	for Jesus, it's good	uunet!rsiatl!ke4zv!gary
534 Shannon Way	enough for Uncle Sam."	emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244	-Ray Stevens	

Date: 13 Sep 1993 15:08:35 GMT
From: swrinde!elroy.jpl.nasa.gov!usc!howland.reston.ans.net!noc.near.net!
jericho.mc.com!fugu!levine@network.ucsd.edu
Subject: Voice Keyers & TS850
To: info-hams@ucsd.edu

I was wondering if anyone has successfully connected the TS850 accessory port to a computer to allow CT to command the radio to play the voice keyer. I have successfully wired the proper acc port (cant remember the number) to do it with the proper resistor value, but I would like to be able to key it from CT like a DVP board.

Secondly, has anyone tried the LTA Voice Blaster software to

key a TS850? If you don't know what it is, it is a TSR (I assume) that turns the SoundBlaster into a Voice Keyer for CT or NA, advertised in this month's NCJ on page 27.

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  ||  \\  ||  //  ||  \\  //  \\  //  
  ||  \\  ||  //  ||  \\//  \\//
```

-----FTAC

Bob Levine KD1GG 7J1AIS VK2GYN
levine@mc.com (508) 256-1300 x247
kd1gg@wa1phy.ma FAX (508) 256-3599

Date: 13 Sep 93 12:32:54 GMT
From: news-mail-gateway@ucsd.edu
Subject: Where is the HTX- HT made ?
To: info-hams@ucsd.edu

Does anyone know where the Radio Shack HTX handies are made ?
Are they made in the Far East under license or Stateside ?
How LOUD is the audio on these suckers compared to an Alinco DJ-580 ?
Rich
WB2JBS

Date: 13 Sep 93 14:05:41 GMT
From: swrinde!cs.utexas.edu!math.ohio-state.edu!howland.reston.ans.net!
noc.near.net!transfer.stratus.com!jjmhome!pig!die@network.ucsd.edu
To: info-hams@ucsd.edu

References <1993Sep8.094751.29146@ke4zv.atl.ga.us>, <1209@pig.UUCP>,
<26rf58\$t9e@news.delphi.com>c.
Reply-To : jjmhome!pig!die@transfer.stratus.com
Subject : Re: Is 8 DSP enough for HF CW ?

In article <26rf58\$t9e@news.delphi.com> cecilmoore@news.delphi.com
(CECILMOORE@DELPHI.COM) writes:
>die@pig.UUCP (Dave Emery) writes:
>> Thus the experience of those who have tried to use 8 bit A/Ds
>>in DSP based filters for ham hf cw is quite consistent with theory.

>
>Thanks, Dave, I needed that. I first tried 8-bit A/Ds and then 10-bit
>A/Ds. I was not even happy with the 10-bit performance. So went to
>a 16-bit sigma-delta system with a two-stage front end filter and
>now I'm happy with the hardware.
>

By the way, I have been looking at the Creative Labs
Soundblaster ASP-16 as a possible vehicle for some communications
related DSP. It sells at discount for around \$225 and is very widely
available and installed. It has dual channel 16 bit sigma delta
converters.

I have an order in for the developers kit and will know
much more about the board as soon as it arrives - they just released
the kit and are starting to ship to developers.

I imagine that using PC soundboards with DSP will prove in the
end to be a lot cheaper than low volume dedicated ham boxes - a Soundblaster
ought to be able to do anything that a DSP-232 can do plus a whole lot
more that a DSP-232 can't.

End of Info-Hams Digest V93 #1088
